# EXHIBIT 17

Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 2 of 244

### UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

IN RE: DA VINCI SURGICAL ROBOTS ANTITRUST LITIGATION

Lead Case No. 3:21-CV-03825

THIS DOCUMENT RELATES TO: ALL CASES

AMENDED EXPERT REBUTTAL REPORT OF LOREN K. SMITH, PH.D. February 10, 2023

HIGHLY CONFIDENTIAL—SUBJECT TO PROTECTIVE ORDER

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 68 of 244

instruments—needed to "evolve" with the new system. <sup>245</sup> Evidence indicates that Intuitive's innovations provide surgeons with more control, precision, and choice over how to perform surgery. <sup>246</sup>

- 84. While Intuitive has innovated on the da Vinci Surgical System over the past two decades, the company continues to sell the system as an integrated product (including the platform, instruments, and servicing) as it had with its first system in 1998.<sup>247</sup> In its sales, licensing, and servicing agreement ("SLSA") with customers and public filings, Intuitive has been transparent about its policies regarding EndoWrist instruments and service of the da Vinci System:
  - a. By signing the SLSA, customers expressly acknowledge that the "System is designed for use only with the Instruments and Accessories" and that "Intuitive does not have an obligation to provide Services (1) on any System where installation, repair, or adjustments have been made by an individual other than an Intuitive technician or an individual approved by

McGrogan (in *Rebotix*) Dep. Tr. 79:9-21 ("A. The -- the platforms had different surgical goals. The Xi had expanded goals for surgery that the Si platform didn't have. And that drove, amongst other things, a lengthening of the instrument as a primary requirement, which made – and lengthening means working deeper in the body. So we wanted to enter at one port location and work much deeper or much farther into the body, and that drove for a longer instrument. And that, among other requirements, made us evolve the platform, the robot, and the instrument to go along with it.").

See, e.g., "About the da Vinci Surgical System," UC Health, accessed January 6, 2023, https://www.uchealth.com/services/robotic-surgery/patient-information/davinci-surgical-system/ ("Robotic-assisted surgery with the da Vinci Surgical System allows surgeons to perform complex minimally invasive surgical procedures with precision and accuracy. The system is an advanced robotic platform designed to expand the surgeon's capabilities and offer an option to open surgery.").

<sup>&</sup>lt;sup>247</sup> See fn. 43 above.

LARKIN-00025488 ("Use, License & Service Agreement" between Intuitive and Larkin Community Hospital dated June 9, 2017), § 5.2(E) ("The System is designed for use only with the Instruments and Accessories. If Customer uses the System with any surgical instrument or accessory not made or approved by Intuitive, Intuitive may discontinue Services, and any warranties applicable to any Services provided prior to any discontinuance will be void."). The agreement defines "Instruments and Accessories" as "instruments or accessories made or approved by Intuitive for use with the System." LARKIN-00025488, § 2.3. See also VMC-00020652 ("Sales, License, and Service Agreement" between Intuitive and Valley Medical Center signed on August 31, 2018), § 5.2(E).

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 69 of 244

Intuitive or (2) which are either necessary or desired as a direct or indirect result, in whole or in part, of unauthorized repair, modification, disassembly, alteration, addition to, subtraction from, reconfiguration, or misuse of the System."<sup>249</sup> Customers also acknowledge that they "will not, nor will Customer permit any third party to, modify, disassemble, reverse engineer, alter, or misuse the System or Instruments and Accessories."<sup>250</sup> Such provisions concerning the use of the system and instruments have been included in the agreements since 1999.<sup>251</sup>

b. In its Form 10-Ks, Intuitive states that it offers a variety of instruments "customized for various surgical procedures."<sup>252</sup> In addition, instruments have a "programmed memory chip" that informs "how the da Vinci system and instruments work together. In addition, the chip will generally not allow the instrument to be used for more than the prescribed number of procedures to help ensure that its performance meets specifications during each procedure."<sup>253</sup> This language has remained consistent since 2001.<sup>254</sup>

LARKIN-00025488, § 5.2(A) ("Intuitive does not have an obligation to provides Services (1) on any System where installation, repair, or adjustments have been made by an individual other than an Intuitive technician or an individual approved by Intuitive or (2) which are either necessary or desired as a direct or indirect result, in whole or in part, of unauthorized repair, modification, disassembly, alteration, addition to, subtraction from, reconfiguration, or misuse of the System, or negligence or recklessness on the part of Customer."). See also VMC-00020652, § 5.2(A).

<sup>&</sup>lt;sup>250</sup> LARKIN-00025488, § 3.4 ("Customer will not, nor will Customer permit any third party to, modify, disassemble, reverse engineer, alter, or misuse the System or Instruments and Accessories.") and VMC-00020652, § 3.4.

See, e.g., Intuitive-01524447 ("Master Purchase and Master Service Agreement" between Intuitive and Beth Israel Medical Center dated October 15, 1999), §§ 3.2(c)-(d) and 2.4(b); and Intuitive-01291299 ("Sales Agreement" between Intuitive and Pitt County Memorial Hospital dated October 20, 1999), §§ 3.2(c)-(d) and 2.4(b).

<sup>&</sup>lt;sup>252</sup> Intuitive 2020 Form 10-K at p. 7.

<sup>&</sup>lt;sup>253</sup> *Id*.

Intuitive 2001 Form 10-K at p. 5 ("A custom computer chip inside each instrument performs several functions that help determine how the system and instruments work together. ... In addition, the chip will not allow the instrument to be used for more than the prescribed number of procedures or hours so that its performance meets specifications during each procedure."); Intuitive 2021 Form 10-K at p. 8 ("A programmed memory chip inside each instrument performs several functions that help determine how the da Vinci system and instruments work together. In addition, the chip will generally not allow the instrument to be

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 104 of 244

142. Evidence also indicates that Intuitive lowered its list prices for the da Vinci model Si during the period above. For example, Intuitive lowered its 2017 U.S. list prices for each of its five specific Si platform models.<sup>367</sup> These reductions ranged between 20 and 28 percent relative to 2016 prices, depending on the specific model.

### B. INTUITIVE'S INSTRUMENT PRICES HAVE NOT BEEN INCREASING OVER TIME

143. As an initial observation, Intuitive's instrument pricing does not appear to differ within the same period for customers who have purchased the same instrument (as defined by the "product" number). 368 For example, when looking across all of Intuitive's instruments sold during 2021, on average, 96 percent of customers paid the same price for the specific instrument. 369 Although the mixture of instruments purchased can and does typically vary between customers due to the specific instrument needs of their surgeries, prices for particular instruments generally show limited variation across customers during a given year. 370 Hence, to account for the possibility that Intuitive increased prices in a discriminatory way by raising the prices of frequently used instruments or on instruments used in high-volume procedures, I examine pricing using alternative lenses. For my initial assessment, I evaluate instrument prices on a "per-procedure" basis after combining the detailed procedures data together with Intuitive's "net sale" amounts from instrument sales transactions for the customer over a particular year. 371

<sup>&</sup>lt;sup>367</sup> Intuitive-00002937 at -940. This slide compares approved U.S. list price changes by model between the two years.

The specific field in Intuitive's Instrument and Accessories data is called "product," which is a six-digit product number typically along with a two-digit suffix. For a discussion of the data preparation involved in this analysis, see Appendix A.

<sup>&</sup>lt;sup>369</sup> See Price Per Procedure Workpaper.

When looking across years, the composition of particular instruments sold might change over time due to changes in the prevalence of "single-use" instruments or due to changes in the frequency of sales for particular instruments after Intuitive's recent Extended Use Program.

<sup>&</sup>lt;sup>371</sup> See discussion under Data Preparation in Appendix A.

Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 167 of 244

# VIII. PROFESSOR ELHAUGE'S DAMAGES ANALYSIS FAILS TO CONSIDER AN APPROPRIATE BUT-FOR WORLD AND SUFFERS FROM OTHER METHODOLOGICAL FLAWS

- 236. For the reasons set forth above in this report, Intuitive's conduct has been procompetitive, and thus the claims of the Plaintiffs lack merit, and no damages are warranted. Notwithstanding this opinion, in this section I evaluate Professor Elhauge's damages analysis under the assumption that the Plaintiffs will prevail on their claims. For the reasons outlined below, I find that Professor Elhauge's estimated damages are unreliable and inflated.
- 237. Professor Elhauge purportedly calculates damages to each of the three Named Plaintiffs and all proposed class members from (1) higher EndoWrist "repair and replacement" prices in the actual world, (2) lower use limits in the actual world, and (3) higher da Vinci servicing prices in the actual world. For EndoWrist "repair and replacement," he first computes damages from higher prices and lower use limits separately, and then computes "combined damages" from the two effects. 603
- 238. For purported damages related to the sale of EndoWrist instruments, Professor Elhauge assumes that but-for entry by third-party companies would have occurred either before the beginning of the Class Period, May 2017, or when the first reset EndoWrist was sold by a third party on July 11, 2018. 604 For purported damages related to da Vinci servicing, Professor Elhauge assumes that but-for entry would have occurred either before the beginning of the Class Period, May 2017, or when da Vinci servicing was first sold by a third party on January 14, 2019. 605 Depending on the but-for entry date, Professor Elhauge's total classwide damages from higher EndoWrist prices, lower EndoWrist use limits, and higher da Vinci servicing prices range from \$2.097 billion to \$2.764 billion. 606

<sup>&</sup>lt;sup>603</sup> Elhauge Report, § VII.A.

<sup>&</sup>lt;sup>604</sup> Elhauge Report,  $\P$  398, 403.

<sup>&</sup>lt;sup>605</sup> Elhauge Report, ¶ 415.

<sup>606</sup> Elhauge Report, Table 9

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 168 of 244

- 239. As I outline below, Professor Elhauge's damages analysis suffers from a number of fundamental conceptual and methodological flaws, resulting in damages estimates that are economically unsupportable and, at a minimum, significantly inflated. In the following Sections A and B, I discuss the following shortcomings in more detail:
  - Professor Elhauge ignores the demand complementarity of the components of the da Vinci Surgical System and fails to consider incentive to increase Intuitive's surgical robotic platform prices if EndoWrist or system servicing prices were reduced.
  - Even setting aside the complementarity of the components of the da Vinci Surgical System,
    which is economically inappropriate, there are a wide array of plausible pricing strategies for
    Intuitive, including price increases on some components of the da Vinci Surgical System.
    Understanding Intuitive's likely strategic responses in the relevant but-for world requires a
    detailed economic analysis, which Professor Elhauge does not provide.
  - Professor Elhauge inappropriately disregards the influence of FDA clearance on the demand for third-party reset EndoWrist instruments.
  - Based on the testimony of third-party companies that sell reset EndoWrists, Professor Elhauge concludes the third parties would have an increased incentive to reset X/Xi EndoWrists, and thus they would have done so (as early as the beginning of the class period). Even if one accepts that third parties would have a greater incentive to invest in technology to bypass X/Xi EndoWrist counters, there is no evidence that they would have had an increased *ability* to do so, especially as early as 2017.
  - In the face of direct evidence to the contrary, Professor Elhauge assumes Intuitive could uniformly extend use limits on all S/Si and X/Xi instruments to 20 uses.
  - Professor Elhauge posits that Intuitive would be incentivized to give a 20 percent price
    discount and double its use limits in the but-for world when calculating "combined damages."
    This effectively reduces Intuitive's instrument prices by 55.4 percent, resulting in a but-for
    price that is even lower than Professor Elhauge's "yardsticks" including the observed prices of
    most reset EndoWrist instruments offered by third parties. As mentioned above, understanding

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 169 of 244

Intuitive's likely pricing strategies in the relevant but-for world requires a detailed economic analysis, which Professor Elhauge has not provided.

- Despite acknowledging that there are what he calls "incontestable" da Vinci System services,
  Professor Elhauge applies a uniform 24 percent price discount to all da Vinci services in his
  posited but-for world. Again, understanding Intuitive's likely strategic pricing decisions in
  Professor Elhauge's assumed but-for world requires a detailed economic analysis, which
  Professor Elhauge fails to provide.
- Based on an assertion that Abbott Laboratory and Intuitive are "similar," Professor Elhauge uses Abbot's proffered service margins as a "yardstick" for what Intuitive's system servicing margins should have been in the but-for world. However, EBIT margins may differ across firms for any number of reasons unrelated to the level of competition that each firm faces. For example, in the case of Abbot and Intuitive, the two companies differ substantially in size and product offerings such that one might not expect their service profit margins to be comparable.
- Professor Elhauge's analysis of da Vinci service damages also suffers from several methodological errors that render his estimate of Intuitive's but-for service prices unreliable.

### A. PROFESSOR ELHAUGE'S PURPORTED DAMAGES RELATING TO THE SALE OF ENDOWRIST INSTRUMENTS

240. In his first of three quantifications of purported damages relating to sales of EndoWrist instruments, Professor Elhauge assumes that, in the relevant but-for world, third-party companies would have "created competitive pressure requiring Intuitive to offer its own repaired EndoWrists and to lower its own prices for new EndoWrists." Professor Elhauge then applies a price discount of 20 percent to all EndoWrist net sales to estimate damages from the sale of Intuitive's new EndoWrists, Intuitive's "own repaired EndoWrists," and third-party reset EndoWrists. In this quantification, Professor Elhauge finds the damages to all proposed class

<sup>&</sup>lt;sup>607</sup> Elhauge Report, ¶ 394. See also Elhauge Report, ¶ 335.

<sup>&</sup>lt;sup>608</sup> Elhauge Report, ¶ 397.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 170 of 244

members are \$805 million if entry occurs on May 21, 2017 (the beginning of the Class Period) and \$631 million if entry occurs on July 11, 2018 (the date the first reset EndoWrist was sold by a third party).<sup>609</sup>

- 241. In a second alternative quantification of purported damages relating to sales of EndoWrist instruments, Professor Elhauge assumes that the use limits Intuitive incorporated into the design of EndoWrists would have been higher in the relevant but-for world. Professor Elhauge provides two reasons for this assumption. First, he claims that Intuitive's use limits have been challenged as anticompetitive and could be found to be illegal in the relevant but-for world. Second, he posits that third-party companies would have created competitive pressure on Intuitive to raise or eliminate the use limits in the but-for world. In his calculations, Professor Elhauge applies a uniform use limit of 20 to all EndoWrists. Second the use limit for EndoWrist instruments (excluding Extended Use instruments for the da Vinci X/Xi System) in the actual world is usually 10, extending the use limit to 20 is approximately equivalent to a 50 percent price discount in Professor Elhauge's calculations. Using this method, Professor Elhauge finds the damages from lower use limits for EndoWrists to all proposed class members are \$1.831 billion if entry occurs on May 21, 2017 (the beginning of the Class Period) and \$1.396 billion if entry occurs on July 11, 2018 (the date the first reset EndoWrist was sold by third party rivals).
- 242. Finally, Professor Elhauge calculates "[c]ombined [d]amages" from the two separate effects related to sales of EndoWrist instruments discussed above. 616 He concludes that the combined

<sup>&</sup>lt;sup>609</sup> Elhauge Report, ¶ 402.

<sup>&</sup>lt;sup>610</sup> Elhauge Report, ¶ 403.

<sup>611</sup> Elhauge Report, ¶ 403.

<sup>&</sup>lt;sup>612</sup> Elhauge Report, ¶ 403.

<sup>613</sup> Elhauge Report, ¶ 405.

<sup>614</sup> Elhauge Report, ¶ 406.

<sup>615</sup> Elhauge Report, ¶ 408.

Professor Elhauge acknowledges that the "combined effect" would not be the sum of the damages when considering each effect separately. *See* Elhauge Report, ¶¶ 409-410.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 171 of 244

damages from higher prices and lower use limits in the actual world to all proposed class members are \$2.270 billion if entry occurs on May 21, 2017 and \$1.748 billion if entry occurs on July 11, 2018.<sup>617</sup>

## 1. Professor Elhauge's purported damages associated with sales of EndoWrist instruments suffer from conceptual flaws

- 243. First and foremost, Professor Elhauge's entire approach to damages is unreliable because he ignores that, as I explained above, Intuitive sells a surgical system composed of complementary components a surgical robotic platform, EndoWrist instruments, and system servicing through a single contract with customers. Even if Professor Elhauge wants to consider Intuitive's system as unbundled, it is inappropriate to ignore the complementarity in demand of its components. As I explained above, unbundling the components of the da Vinci Surgical System would incentivize Intuitive to change its pricing strategy to achieve as much system integration as possible by, as an example, lowering its price for EndoWrists and increasing the price of the da Vinci platform, which would affect the sale of EndoWrists relative to the expected actual world. In this but-for world, it is likely that hospitals would get a worse financial deal than they would in the expected actual world, which significantly would reduce any claimed damages and potentially even turn them negative.
- 244. Even setting aside complementarity among the components of the daVinci Surgical System, Professor Elhauge does not conduct any formal economic analysis of Intuitive's competitive response to entry in his asserted but-for world. He assumes that (a) a reset EndoWrist from a third party rival, (b) a repaired EndoWrist from Intuitive, and (c) a new EndoWrist from Intuitive are near perfect substitutes. 620 However, evidence indicates that, from an economic perspective,

<sup>&</sup>lt;sup>617</sup> Elhauge Report, ¶ 411.

<sup>&</sup>lt;sup>618</sup> See Section III above.

<sup>619</sup> See Section VI.D above.

<sup>&</sup>lt;sup>620</sup> Elhauge Report, ¶ 395.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 172 of 244

new and reset EndoWrist instruments are significantly differentiated products. <sup>621</sup> Given this product differentiation, Intuitive may choose to lower, maintain, or even raise EndoWrist instrument prices to maximize profits in the relevant but-for world. More specifically, Intuitive's optimal strategy may be to cede the price sensitive group to third parties and raise prices to the

Note that the refurbishment program (Project Dragon) that Intuitive considered was different from third party resets, which is reflected in the costs associated with it. See ¶ 192.a. See also Goodson 30(b)(1) (10/27/2022) Dep. Tr. 73:6-13 ("Q. The project [Project Dragon, Refurbishment] was never implemented, correct? A. Correct. Q. Why is that? A. The requirement for demonstrating the reliability of the instruments repeatedly over life and the cost associated with replacing the parts to achieve that reliability and building a business became cost prohibitive for pursuing the project.").

<sup>621</sup> Francis (10/14/2022) Dep. Tr. 23:22-24:23. ("Q. Would you be willing to use an EndoWrist with a circumvented use counter on a patient? ... A. No. Q. Why not? A. From what I understand, the number on a repeated use instrument is placed there within a recommendation based on somebody, whether it was the engineers or elsewhere, that stated that was a normal number of uses that would basically give you normal use of the instrument. To go beyond that does not guarantee or in any way imply the instrument will continue to work as designed. And for one, I do not -- I do not like inefficiency. So to have to switch out an instrument that's malfunctioning or not working properly or slowing me down in some way really grates at my performance of operations. O. If Franciscan were to tell you that its hospitals would be stocking EndoWrists that had reset use counters, how would you react? ...A. I -- I would ask specifically if Intuitive had okayed this and what their engineers were saying about it because they're the ones who designed the instrument to begin with."). Estape (10/22/2022) Dep. Tr. 57:18-58:7. ("O. What do you remember about the meeting? A. Well, a company comes in and says that it can wipe out the number of uses on an instrument that's FDA cleared for only ten uses, I thought that was a pretty interesting meeting. Q. Why was it interesting to you? A. Well, you know, everything that we do in medicine is for safety, you know, and certain things are cleared only by the FDA, and it just seemed like a -- for -I'll just use the word shady, a very shady meeting where, you know, oh, I can take this and I can wipe off the uses for this instrument and you can keep using it forever. It just didn't seem -- you know, it didn't seem like a very up-and-up program. I've never heard of that before."). Maun (11/8/2022) Dep. Tr. 27:7-28:18 ("Q. Would you be comfortable with using an EndoWrist with a circumvented use counter? A. I probably would not use that. Q. Why not? A. Because then I don't know the history of the number... You know, I just don't -- I just don't know the -- what -- how that would function at use nineteen or twenty. Q. What would your concern about the function be at use nineteen or twenty? A. You know, just the wear and tear on the instrumentation, not being able to perform the maneuvers I need to for the operation.").

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 173 of 244

less price sensitive customers that continue to demand new instruments. 622 Among other factors, Intuitive's response would depend on how many of Intuitive's customers would purchase reset EndoWrists from third parties. Evidence indicates that hospitals and surgeons would be reluctant or unwilling to use reset EndoWrist instruments. 623 Hence, it is plausible that Intuitive would maintain its current price or even raise the price of instruments to inframarginal customers while forgoing a small share of sales to third party rivals in the but-for world. This scenario would significantly reduce overall damages relative to Professor Elhauge's estimates, and potentially result in negative damages for customers who prefer new instruments.

245. Professor Elhauge has not appropriately accounted for the role of FDA clearance in hospital purchasing decisions. Evidence indicates that some hospitals and surgeons are hesitant or even unwilling to use instruments without FDA clearance due to quality or safety concerns. For instance, Dr. Estape from Larkin stated that "[...] I'm not willing to do something that's not FDA approved because, you know, anything that happens to the patient, they're going to come down on me for having used equipment that was not FDA approved at that time."<sup>624</sup> Stacey Donovan, executive director of surgical services at EvergreenHealth, testified that "I don't think

<sup>622</sup> See e.g., Richard G. Frank and David S. Salkever, "Generic Entry and the Pricing of Pharmaceuticals", Journal of Economics & Management Strategy 6, No. 1 (1997), 75–90 ("This result is consistent with the descriptive information reported by Grabowski and Vernon (1992) showing brand-name prices rising relative to generic prices sub-sequent [sic] to generic entry. ... Caves et al. (1991) also estimate a regression model that was quite similar to the one estimated by Grabowski and Vernon (1992) and obtained very similar results. ... Note that the data suggest an upward drift in real brand- name prices. These data are consistent with the observations made by Grabowski and Vernon (1992). The figure shows a 50% rise in brand-name price five years after generic entry. The trend runs counter to the notion that brand-name producers engage in vigorous price competition with generic entrants."). See also, e.g., Yi Qian, "Brand Management and Strategies Against Counterfeits", Journal of Economics & Management Strategy 23, No. 2 (2014), 337 ("First, segmentation of customers into purchasing high-end brand and low-end counterfeits could imply that the brand could reoptimize to a higher price for the high-valuation consumers (Frank and Salkevers [sic], 1997); second, the brand charges a higher price to signal quality so as to separate from the counterfeits.").

<sup>&</sup>lt;sup>623</sup> See, e.g., ¶ 99.b.

<sup>&</sup>lt;sup>624</sup> Estape (10/22/2022) Dep. Tr. 59:16-22.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 174 of 244

[EvergreenHealth] would do business with an organization that I'm aware of that doesn't have are FDA clearance, at least not knowingly."<sup>625</sup> Similarly, Edward Harrich, director of surgical services at Pullman Regional Hospital, testified that "we like to stay with FDA approval on everything we're using and doing [...]."<sup>626</sup> Professor Elhauge also acknowledges that some hospitals had concerns about resets without FDA clearance.<sup>627</sup> The fact that Restore continued to pursue 510(k) clearance even though it allegedly did not think it "needed" it, indicates that FDA clearance is important from a hospital demand perspective.<sup>628</sup> However, Professor Elhauge conducts no analysis to assess the extent to which any hospitals would purchase reset EndoWrists from third parties without FDA clearance in the but-for world.

246. As a final note in this section, I understand that Iconocare obtained FDA clearance for one S/Si instrument in September 2022.<sup>629</sup> I am not aware of any evidence that Intuitive delayed Iconocare's achievement of FDA clearance or that Intuitive has hindered Iconocare from sales of resets for the EndoWrist instrument that was cleared. Therefore, damages in connection with sales of a cleared reset EndoWrist instrument should be zero.

<sup>625</sup> Donovan (in *Rebotix*) Dep. Tr. 132:7-11.

<sup>626</sup> Harrich (in *Rebotix*) Dep. Tr. 154:5-19.

<sup>&</sup>lt;sup>627</sup> Elhauge Report, ¶¶ 293, 300.

<sup>&</sup>lt;sup>628</sup> Elhauge Report, ¶ 287. *See also* fn. 289 (for surgeons' perspective).

Foreman Report, § IV.B, and more specifically, § IV.B.3.a.

Letter from U.S. FDA to Rick Ferreira at Iconocare Health Re: K210478 dated 11/15/2022, accessed January 6, 2023, available at https://www.accessdata.fda.gov/cdrh\_docs/pdf21/K210478.pdf with attached FDA letter dated 9/30/2022 ("We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce....You may, therefore, market the device, subject to the general controls provisions of the Act."). See ¶ 53 above.

Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 175 of 244

## 2. Professor Elhauge's purported damages calculations suffer from methodological and computational flaws

247. Professor Elhauge's start date of May 21, 2017 for his damages calculations is not supported by evidence in the case. 630 Professor Elhauge presents damages assuming a start date of May 21, 2017, which is a week before the Lexmark ruling was decided. 631 He claims that the Lexmark ruling "mooted" Rebotix's concerns and "thus would not have deterred entry after that time." 632 However, Professor Elhauge does not present evidence that Rebotix had the infrastructure in place to begin selling reset EndoWrist instruments in the U.S. immediately following the Lexmark decision. Evidence indicates that Rebotix "re-examined" selling reset EndoWrists following the Lexmark decision, and Rebotix Repair LLC was opened in 2019. 633 There is no indication that Rebotix Panama—which preceded Rebotix Repair LLC—had plans to sell reset EndoWrists in the U.S. 634 Evidence also indicates that Restore's interest in reset EndoWrists was "sparked" after a meeting between Mr. Parker and Mr. May in April 2018, and Restore as a company was formed in July 2018. 635 Moreover, setting aside the timing when third-party companies would be positioned to sell reset EndoWrists in the U.S., Professor Elhauge does not analyze how quickly hospitals and surgeons would have been willing to purchase and use reset EndoWrists, assuming that they would been at all. 636 For these reasons, Professor Elhauge's assumption that any price discount and/or increase in the use limit would occur on May 21, 2017 is unreliable and overly aggressive. 637

<sup>&</sup>lt;sup>630</sup> The same concepts apply to Professor Elhauge's assumption to calculate damages for da Vinci service beginning on May 21, 2017.

<sup>&</sup>quot;High Court Reins In Patent Owners' Post-Sale Power," Ryan Davis Law360.com, May 30, 2017, accessed on January 20, 2023, https://www.law360.com/articles/914742.

<sup>632</sup> Elhauge Report, ¶ 307.

<sup>633</sup> REBOTIX174692 at -695.

Rebotix personnel closed Rebotix Panama in 2018 when it decided to "kick off the US and put all our concentration on it." *See* Papit (in *Rebotix*) Dep. Tr. 51:3-52:8.

<sup>&</sup>lt;sup>635</sup> Parker (in *Restore*) 27:3-18 and 9:18-20.

<sup>&</sup>lt;sup>636</sup> See, e.g., ¶ 245 above.

<sup>&</sup>lt;sup>637</sup> In the remainder of this section, I present results based on Professor Elhauage's damages analysis that begins on 7/11/2018 for sales of EndoWrist instruments or 1/14/2019 for sales

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 176 of 244

248. Professor Elhauge applies a 20 percent price discount and an increased use limit of 20 to both S/Si and X/Xi model instruments in his damages calculations. His basis for including damages for X/Xi is that in the absence of the challenged conduct, third parties would have had a stronger incentive to develop a workaround for X/Xi EndoWrist counters, and claims by third parties that they likely would have done so. However, evidence indicates that third parties have *not* yet developed a process for resetting X/Xi EndoWrist instruments. Hence, it is unclear when or if third parties would have developed a way to reset X/Xi EndoWrists in the relevant but-for world. Had third parties been unable to reset X/Xi EndoWrists, there is no basis for damages related to their sales.

Professor Elhauge presumably relies on Restore's and Rebotix's unsupported claims that they would have developed a way to circumvent the design of X/Xi instruments if Intuitive had not enforced the terms of its customer contracts. See Elhauge Report, ¶¶ 273, 275-276.



of da Vinci servicing. I have included results of my analysis with a start of 5/21/2017 in my workpapers; see Adjusted Damages.xlsx.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 177 of 244

- 249. In addition to excluding X/Xi EndoWrist instruments, I also exclude S/Si instrument models for which resets have not been available from third parties. 640 Professor Elhauge does not explain why pricing for an instrument that third parties do not reset would differ in his assumed but-for world where Intuitive lowers prices in response to competitive pressure from third parties.
- 250. With regard to extended use limits, Professor Elhauge claims that Intuitive's documents provide a basis to calculate the amount by which use limits would have increased in his assumed but-for world. All In adjusting the use limits, Professor Elhauge implicitly assumes that Intuitive's use limits are not justified by safety concerns. Instead, he speculates that use limits could be uniformly set to 20 in the but-for world. To arrive at this conclusion, Professor Elhauge ignores evidence on instrument use limits from Intuitive's actual Extended Use Program. For example, evidence shows that even after significant testing to improve the instruments, Intuitive was only able to increase use limits for a subset of X/Xi instruments to 12 to 18 uses.
- 251. Professor Elhauge postulates that Intuitive would be incentivized to give a 20 percent price discount *and* double its use limits in the but-for world for his "combined damages" calculations. Again, understanding Intuitive's combined pricing/use limit strategy requires a detailed

<sup>&</sup>lt;sup>640</sup> See REBOTIX162208, SIS001637, and Restore-00000003. For example Professor Elhauge's damages analysis includes 428090 (Single-Site 5 mm "Permanent Cautery (hook)"), which is not on the third parties' pricing schedules for reset EndoWrists. Intuitive-00279923 at -941.

<sup>&</sup>lt;sup>641</sup> Elhauge Report, ¶ 405.

<sup>642</sup> Elhauge Report, ¶ 405.

<sup>643</sup> Elhauge Report, ¶ 405.

Program," which consists of select da Vinci Xi and da Vinci X instruments possessing 12 to 18 uses ..., compared to previously 10 uses. These Extended Use instruments represent some of our higher volume instruments but exclude stapling, monopolar, and advanced energy instruments."). Intuitive-00004692 ("Extended Use White Paper") at -692 ("Based on a number of design and manufacturing improvements made over the past several years....a number of X/Xi instrument shave been re-evaluated for extended life reliability."). See also, DeSantis (in Restore) Dep. Tr. 64:10-22 ("Q. ... Okay. And do you have any idea about the - the -- cost of running the testing for the Xi extended lives program? A. Just the testing part of it? Q. Yes. A. I can give a general ballpark. It's significant. It -- it takes -- We go through the whole life test to go through the whole BNV; and it takes a lot of time, so you know.").

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 178 of 244

economic analysis, which Professor Elhauge has not provided. More specifically, in Professor Elhauge's posited but-for world, lower price levels and higher use limits are strategic substitutes—i.e., Intuitive can offer hospitals greater value either by lowering price or by extending use limits. This means that Intuitive likely would reduce the magnitude of any price discount if it was forced or induced to extend EndoWrist use limits, and the extent to which the magnitude of any price discounts would be reduced depends on hospitals' willingness to trade off price discounts for extended uses.

- 252. That Professor Elhauge ignores these relevant economics is reflected in the size of the effective price reductions assumed in his "combined damages" calculation. Professor Elhauge's purported "combined damages" is equivalent to an effective 55.4 percent discount on Intuitive's prices. 646

  The effective 55.4 percent discount exceeds Professor Elhauge's "benchmarks" when he considers but-for world price discounts. Setting aside the merits of his "benchmarks," Professor Elhauge referenced discounts ranging from 20 percent to 45 percent, where 45 percent corresponded to the "average price offered by actual entrants Restore, SIS, and Rebotix…" 647

  Notably, an effective discount of 55.4 percent exceeds even the upper end of this range.
- 253. Table 3 summarizes the impact on Professor Elhauge's purported damages after accounting for instruments that third parties do not or have not reset. The exclusion of these instruments reduces damages under Professor Elhauge's "combined" scenario to \$364 million, which is 21 percent of Professor Elhauge's damages estimate as presented in his report.

Intuitive-00559776 ("Q&A for Extended Use Program and Q2") at -777 ("The price per *instrument* of our longer-lived instruments will be higher than the previous shorter-lived instruments reflecting the significant investments we have made in developing these instruments – however, from a customer perspective, the *price per use* of these instruments will be lower."). As part of its Extended Use Program, Intuitive also introduced four instruments with the "same [number of] uses but reduced pricing." *See* Intuitive-00560028 at -038.

<sup>646</sup> See Table 3 below.

<sup>647</sup> See Elhauge Report, ¶¶ 351-356 and Table 3. Professor Elhauge includes Rebotix's sales to distributors in his calculation of the volume-weighted average price discount offered by third parties. This inflates the average price discount as distributors typically pay a much lower price for reset instruments than hospitals. When I exclude Rebotix's sales to distributors, the average price discount is reduced from 45 percent to 40 percent.

Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 179 of 244

TABLE 3 PROFESSOR ELHAUGE'S QUANTIFICATION OF PURPORTED DAMAGES RELATED TO THE SALE AND RESET OF ENDOWRISTS ADJUSTED: BUT-FOR ENTRY 7/11/2018

			Purported Damages					
		Net Sales	Price Effect	Use Limit	Combined			
		[1]	[2]	[3]	[4]			
Professor Elhauge's Purported Damages (All S/Si and X/Xi EndoWrist Instrument Models)								
Valley Medical Center	[A]	2,287,295	457,459	1,022,722	1,275,637			
Franciscan Health	[B]	7,767,685	1,553,537	3,411,723	4,282,916			
Larkin Community Hospital	[C]	711,600	142,320	353,550	425,160			
Classwide	[D]	3,155,130,010	631,026,000	1,396,401,673	1,748,147,339			
Effective Price Discount	[E]		20.0%	44.3%	55.4%			
<b>EndoWrist Instrument Models Included in</b>	Γhird-P	arty Pricing Sheet	s					
Valley Medical Center	[F]	88,400	17,680	44,200	53,040			
Franciscan Health	[G]	1,154,300	230,860	577,150	692,580			
Larkin Community Hospital	[H]	321,300	64,260	158,400	190,980			
Classwide	[I]	607,466,494	121,493,297	303,424,086	364,232,565			
Classwide Damages as % of Elhauge Total	[J]		19.3%	21.7%	20.8%			

#### Sources and Notes:

EndoWrist Instrument Models Included in Third-Party Pricing Sheets (SIS001637,REBOTIX162208, Restore-00000003). All values in US dollars. Note that the upper panel reflects Professor Elhauge's damages calculations shown in Table 5, Corrected Table 6, and Corrected Table 7 but not Corrected Table 9, as there are inconsistencies presented in Professor Elhauge's damages across different tables.

[E]: [D] / [D][1].

[J]: [I] / [D].

### B. PROFESSOR ELHAUGE'S PURPORTED DAMAGES RELATED TO DA VINCI SYSTEM SERVICING

254. Professor Elhauge's quantification of purported damages related to system servicing assumes that third-parties would have "created competitive pressure requiring Intuitive to lower its own prices for da Vinci service" in the but-for world. Professor Elhauge uses Abbott Laboratories' medical equipment repair and maintenance services margin as a "yardstick" for Intuitive's services margin and calculates that da Vinci servicing prices would have to be discounted by 24

<sup>&</sup>lt;sup>648</sup> Elhauge Report, ¶ 413.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 180 of 244

percent in the but-for world.<sup>649</sup> He then applies this price discount of 24 percent to the total dollar amount of da Vinci services sold and finds that damages from higher servicing prices to all proposed class members are \$494 million if entry occurs on May 21, 2017 (the beginning of the Class Period) and \$350 million if entry occurs on January 14, 2019 (the date da Vinci servicing was first sold by Restore).<sup>650</sup>

- 255. Professor Elhauge provides no analysis of the demand for da Vinci servicing and Intuitive's competitive response in his asserted but-for world. Even with close to 20 thousand companies estimated to be in the business of used medical devices servicing in the U.S., only 30 to 35 percent of repairs in the U.S. are done by third-party repair companies, according to Clif Parker at Restore. Notably, the demand for Restore's da Vinci System servicing was much smaller relative to the demand for its EndoWrist resets, indicating a lack of demand for third-party da Vinci services. Furthermore, evidence indicates that the system "servicing" that has been performed by Restore suffered from substandard quality. Without assessing the competitive impact of Intuitive's potential rivals for da Vinci servicing, Professor Elhauge speculates that Intuitive would reduce its servicing prices due to entry and applies a blanket price discount of 24 percent to all da Vinci servicing revenues.
- 256. As explained in Section III, Professor Elhauge's entire approach to damages is unreliable because he ignores interdependence in demand of the components of Intuitive's surgical system. Moreover, as discussed above, unbundling the components of the da Vinci Surgical System would incentivize Intuitive to change its pricing strategy to achieve as much system integration as possible; for example, Intuitive may lower prices on system servicing and raise the price of

<sup>&</sup>lt;sup>649</sup> Elhauge Report, ¶413. See also Elhauge Report, fn. 970.

<sup>&</sup>lt;sup>650</sup> Elhauge Report, ¶¶ 415-416.

Parker (10/25/2022) Dep. Tr. at 161:25-162:4. Moreover, as I discussed in Section VII, an IBIS World report estimate shows that independent service organizations only account for around 25 percent of medical repair and maintenance revenue in 2021, despite the fact that they typically charge lower prices than original equipment manufacturers.

Expert Report of Loren K. Smith, Ph.D., Restore Robotics LLC and Restore Robotics Repair LLC v. Intuitive Surgical, Inc., Case No. 5:19-cv-55, August 20, 2021, ¶ 27 and Table 1.

<sup>&</sup>lt;sup>653</sup> See ¶ 203.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 181 of 244

the da Vinci platform, which likely would decrease demand for the da Vinci Surgical System and thus system servicing relative to the expected actual world.<sup>654</sup> This could greatly reduce damages or even turn them negative.

- In addition, Professor Elhauge states that there are da Vinci services that are proprietary to Intuitive and are "incontestable" in the sense that they could not be provided by third-party companies. <sup>655</sup> Professor Elhauge posits that because Intuitive charges the same hourly rate for both contestable and incontestable services (for Time & Material customers not enrolled in a service plan), third-party companies offering contestable services would drive down the prices for both. <sup>656</sup> Again, Professor Elhauge provides little support for relying on this assumption. For example, he does not assess what proportion of Intuitive's system servicing revenues (or margins) might be attributable to contestable services. In the relevant but-for world Intuitive could, and likely would, unbundle its contestable and incontestable services, and thus if Professor Elhauge's characterization of system servicing markets is correct, economic principles dictate that Intuitive would be incentivized to increase the price of "incontestable" services, in which case Professor Elhauge's purported damages would be reduced or even eliminated.
- 258. Professor Elhauge does not consider any of these plausible responses by Intuitive in his posited but-for world. Moreover, to support his claim that Intuitive would lower its rate for "incontestable" and "contestable" services in the but-for-world, Professor Elhauge cites to a "uniform hourly rate" for Time & Material customers in Intuitive's "2019 US Billable Services Rates." Given that servicing revenue from Time & Material customers has accounted for no more than about 1.3 percent of Intuitive's servicing sales in the U.S. since 2017, Professor Elhauge does not provide support as to why his use of this rate schedule to make assessments

<sup>654</sup> See Section VI.D above.

<sup>655</sup> Elhauge Report, ¶ 223 and fn. 973.

<sup>656</sup> Elhauge Report, fn. 973.

<sup>657</sup> Elhauge Report, ¶ 225 (citing to Intuitive-00154125).

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 182 of 244

about service plan pricing for the vast majority of its customers in his envisioned but-for-world would be appropriate. 658

However, it's not clear that Restore, the only company to perform da Vinci servicing, ever serviced any X or Xi da Vinci Surgical Systems. 660 Professor Elhauge justifies his inclusion of the X/Xi systems in his servicing damages based on the "logical" conclusion that "in a but-for world with unrestrained rival repair of X/Xi-compatible EndoWrists, rivals would also provide X/Xi servicing."661 However, based on Professor Elhauge's logic, given that third parties have not been able to commercialize reset X/Xi EndoWrist instruments, third parties also would not be able to provide X/Xi servicing. 662 Professor Elhauge states that he is "unaware of any technical barriers to do servicing on the da Vinci S, X, and Xi relative to the da Vinci Si," but he provides no evidence as to why it is reasonable to assume that, given the "advances in the technology" of da Vinci Xi System relative to the da Vinci Si System, third parties would be able to service da Vinci X/Xi Systems. 663

<sup>658</sup> Intuitive-02072145.

<sup>659</sup> Elhauge Report, ¶ 416.

Elhauge Report, fn. 976. *See also*, Gordon (in *Restore*) Depo. Tr. 102:8-21 ("Q. What models of da Vinci surgical robots did you do this work on? A. I believe it was just IS3000. There may -- Q. And is that -- A. -- have been an IS2000 in there somewhere, but I don't recall. I believe it was just the Si's. Q. The Si's. Okay. Have you ever heard of the Xi? A. I have. Q. Or the -- have you ever performed preventative maintenance or repairs on an X or Xi? A. I have not.").

Elhauge Report, fn. 976.

<sup>&</sup>lt;sup>662</sup> See ¶ 248 (that third parties have not commercialized reset X/Xi EndoWrists).

Elhauge Report, fn. 976; Burke (9/27/2022) Dep. Tr. 59:5-13 ("Q. You said earlier that you were advocating for the purchase of an Xi; correct? A. Yes. Q. Why did you want the hospital to purchase an Xi? A. At that time, I thought that the advances in the technology had improved enough to warrant another robot, plus we had -- our Si was probably the oldest one in the State of Washington.")

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 183 of 244

- 260. [Intentionally left blank 664,665,666,667,668]
- 261. Setting aside these larger conceptual issues, Professor Elhauge's use of Abbott Laboratory's EBIT profit margin for services as a yardstick for Intuitive's EBIT profit margin in the but-for world is inappropriate for the following reasons.<sup>669</sup>
- 262. First, it is widely known to economists that economic profit margin, not EBIT profit margin, is a more relevant "yardstick" to compare between firms that sell similar goods or services. <sup>670</sup> For instance, in a perfectly competitive industry, entry or the threat of potential entry will drive economic profits, but not necessarily accounting profits, down to zero in the long-run equilibrium. <sup>671</sup> Moreover, due to a variety of factors, such as the imputation of fixed costs, intertemporal allocation of R&D expenses, interproduct allocation of marketing expenses, etc., a company's accounting profit margin in published financials often fails to accurately reflect its

<sup>664 [</sup>Intentionally left blank]

<sup>665 [</sup>Intentionally left blank]

<sup>666 [</sup>Intentionally left blank]

<sup>&</sup>lt;sup>667</sup> [Intentionally left blank]

<sup>668 [</sup>Intentionally left blank]

Elhauge Report, ¶ 413. Note that Professor Elhauge relies on Abbott's EBIT for servicing as reported by IBISWorld. *See* Elhauge Report, ¶¶ 366 and 413. However, Abbott does not report such a metric in its public filings, and IBISWorld does not provide any details on how it may have calculated or estimated its reported service-specific EBIT for Abbott. Professor Elhauge does not demonstrate that the specific measurement he uses is an accurate reflection of Abbott's actual service unit performance.

Franklin M. Fisher, and John J. McGowan, "On the misuse of accounting rates of return to infer monopoly profits," *American Economic Review*, Vol. 73, No. 1 (March 1983), p. 82. "[I]t is clear that it is the economic rate of return that is equalized within an industry in long-run industry competitive equilibrium and (after adjustment for risk) equalized everywhere in a competitive economy in long-run equilibrium. It is an economic rate of return (after risk adjustment) above the cost of capital that promotes expansion under competition and is produced by output restriction under monopoly. Thus, the economic rate of return is the only correct measure of the profit rate for purposes of economic analysis. Accounting rates of return are useful only insofar as they yield information as to economic rates of return."

<sup>&</sup>lt;sup>671</sup> Carlton and Perloff, at p. 86: "In long-run equilibrium, firms receive economic profits of zero, which is just enough to induce them to stay in the market."

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 184 of 244

true economic profit margin. <sup>672</sup> Professor Elhauge's comparison does not account for these potential factors.

- 263. Second, Professor Elhauge's calculation of damages assumes that Intuitive and Abbott Laboratories are comparable companies with respect to their service operations. He asserts that this is because "Abbott is also a medical device OEM and is the firm most similar to Intuitive in terms of size within this medical equipment repair and maintenance service industry." Yet, the two companies differ considerably in size. In 2021, Abbott's total company revenue is nearly 8 times as large as Intuitive's total revenue, while Intuitive's servicing revenue doubles Abbott's servicing revenue. There are also marked distinctions between the two companies such that one would not expect their cost structure or financial metrics to be comparable. For example, Abbott's principal medical devices are for the treatment of cardiovascular diseases, diabetes care products, and neuromodulation devices for the management of chronic pain and movement disorders, while Intuitive's services are limited to its own da Vinci Surgical Systems. 675
- 264. Even if Professor Elhauge's purported EBIT profit margin for servicing for Abbott is an appropriate yardstick (which as I explained above, it is not), Professor Elhauge's calculation of Intuitive's EBIT profit margin for servicing and but-for service price suffers from several

Peter Davis and Eliana Garces, *Quantitative Techniques for Competition and Antitrust Analysis* (Princeton University Press, 2010), p. 298 ("Margin and profitability figures taken from published accounting documents often include imputations of fixed costs and estimation of depreciation that may not bear much relation to the economic concepts used to calculate economic costs. Also, accounting profits may be subject to intertemporal or interproduct allocations of revenues and expenses that do not correspond to meaningful economic concepts.")

<sup>673</sup> Elhauge Report, ¶ 413.

Curran at p. 29; Abbott Form 10-K for the Fiscal Year Ended December 31, 2021 (Abbott 2021 Form 10-K) at p.50; Intuitive Form 10-K For the fiscal year ended December 31, 2021 at p. 84.

Abbott's principal medical devices are rhythm management, electrophysiology, heart failure, vascular and structural heart devices for the treatment of cardiovascular diseases, and diabetes care products for people with diabetes, as well as neuromodulation devices for the management of chronic pain and movement disorders. *See* Abbott 2021 Form 10-K at p. 3.

### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 185 of 244

methodological flaws that render his estimation of damages related to da Vinci servicing unreliable.

- 265. First, Professor Elhauge compares the average product cost margin for service over 2017-2020 from an internal Intuitive document with Abbott's gross profit margin, while Intuitive reports significantly lower gross profit for services in its public filings. <sup>676</sup> Professor Elhauge does not explain why he selects the larger product cost margin that leads to larger servicing damages. Replacing the average product cost margin with Intuitive's actual gross margin for service reduces Intuitive's EBIT profit margin for services from 42 percent to 33 percent and the but-for service price discount from 24 percent to 12 percent. <sup>677</sup>
- 266. Second, because "Intuitive does not report EBIT profit margins just for service," Professor Elhauge multiplies the 2017-2020 average product cost margin for services by a ratio of EBIT over gross profit for *all products and services* in 2021 to estimate Intuitive's EBIT profit margin for services. <sup>678</sup> Professor Elhauge provides no support as to why Intuitive's EBIT specific to servicing, which accounts for only 16 percent of Intuitive's total gross profit in 2021, would be proportional to its overall EBIT. <sup>679</sup>

As reported in Intuitive's 10-Ks, its gross profit margin for services is 68.6% in 2021, 63.1% in 2020, 65.6% in 2019, 66.3% in 2018, and 68.6% in 2017. These numbers are significantly lower than Professor Elhauge's average product cost margin of 87% for years 2017-2020. Elhauge Report, ¶ 366. Intuitive-00595405, tab CM-SERVICE. The gross profit margin for services = (revenue for service – cost of revenue for service) / revenue for service. In 2021, Intuitive's revenue for service was 916.2 million, and Intuitive's cost of revenue for service was 287.5 million. 68.6% = (916.2 - 287.5) / 916.2. The same calculation method is used to calculate the gross profit margin in 2017-2020. 2020: 63.1% = (723.8 - 266.9) / 723.8. 2019: 65.6% = (724.2 - 249.2) / 724.2. 2018: 66.3% = (635.1 - 213.9)/ 635.1. 2017: 68.6% = (572.9 - 179.9) / 572.9 See Intuitive 2021 Form 10-K at p. 84. See also Intuitive Surgical Form 10-K For the Fiscal Year Ended December 31, 2018 at p. 64.

Intuitive's EBIT profit margin for services = 68.6% (Intuitive's gross profit margin for services in 2021) × 0.48 (the ratio of EBIT over gross profit for *all products and services* in 2021) = 33%. Service price discount = (1-0.33)/(1-0.24)-1=-0.12, or a 12% price drop.

<sup>&</sup>lt;sup>678</sup> Elhauge Report, ¶ 366.

Elhauge Report, ¶ 366 and fn. 883. Intuitive's gross profit for services in 2021 = \$916.2 million - \$287.5 million = \$628.7 million; Intuitive's total gross profit in 2021 = \$3958.5

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 186 of 244

267. Finally, Professor Elhauge does not rely on the correct servicing contracts or processing instructions as indicated by Intuitive. Specifically, Professor Elhauge's corrected damages relies partially on out-of-date data and does not fully impute sales using the annual price field as instructed by Intuitive. <sup>680</sup> In Table 4 below, I adjust Professor Elhauge's quantification of service damages by (1) adjusting the service price discount, (2) adjusting the servicing data used in Professor Elhauge's calculations, and (3) limiting the servicing damages to S/Si platform. This reduces purported classwide damages related to da Vinci System servicing to 15.9 percent of Professor Elhauge's estimates.

TABLE 4 ELHAUGE PURPORTED SERVICE DAMAGES ADJUSTED: BUT-FOR ENTRY 1/14/2019

		Elhauge Service I Damages	Adjusted Price Discount Based on Comparable Margin	Adjusted Servicing Sales Revenue	Adjusted to S/Si Platform Revenue	Admsted Revenue
		[1]	[2]	[3]	[4]	[5]
Valley Medical Center	[A]	281,331	137,704	172,464	43,176	21,134
Franciscan Health	[B]	1,392,735	681,707	1,455,407	528,595	258,733
Larkin Community Hospital	[C]	65,894	32,254	18,210	9,105	4,457
Classwide	[D]	349,574,656	171,107,590	299,853,991	113,525,344	55,567,669
Classwide Damages as % of Elhauge Total	[E]		48.9%	85.8%	32.5%	15.9%

#### Sources and Notes:

All values in US dollars.

<sup>[1]:</sup> Reflects Professor Elhauge's damage calculations shown in Corrected Table 9 of Elhauge Report but not Table 8, as there are inconsistencies presented in Professor Elhauge's damages across different tables.

<sup>[2]:</sup> Uses the same service sales numbers Professor Elhauge uses but applied with the adjusted margin of ~12%.

<sup>[3]:</sup> Uses the same margin of 24% that Professor Elhauge applied but using adjusted data as provided by Intuitive's data response, Intuitive-00695236 and Intuitive-02072147.

<sup>[4]:</sup> Uses the same margin of 24% that Professor Elhauge applied but using adjusted data as provided by Intuitive's data response, Intuitive-00695236 and Intuitive-02072147 and only included S/Si service revenue.

million. It follows that the gross profit of service is only 16% of Intuitive's total gross profit in 2021. *See* Intuitive 2021 Form 10-K at p. 84.

Elhauge relies on Intuitive-00000316.xlsm, Intuitive-00706089.xlsx, and Intuitive-00695236.xlsx, and furthermore relies on the net value field when populated for servicing net revenues. Intuitive's responses to plaintiffs' data-questions explain that servicing net revenues should be calculated strictly from the annual price field in Intuitive-00695236 and Intuitive-02072147. *See* Intuitive's Responses to Plaintiffs' Second Follow-Up Data Questions on Intuitive's Responses, response to question 8.

#### Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 187 of 244

- [5]: Uses the adjusted margin of  $\sim$ 12% and the adjusted data as provided by Intuitive's data response, Intuitive-00695236 and Intuitive-02072147 and only included S/Si service revenue. [E]: [D] / [D][1].
- 268. In Table 5, I adjust Professor Elhauge's purported total damages to each of the three Named Plaintiffs and all proposed class members. For damages related to the sale of EndoWrists, I limit to instruments that are included in third-party pricing sheets. For damages related to da Vinci System servicing, I adjust Professor Elhauge's servicing margin calculation, his servicing data processing, and limit to S/Si platform servicing revenues. Setting aside the conceptual flaws in Professor Elhauge's damages analysis, I find that adjusting for these computational and methodological errors alone reduces the total purported classwide damages to approximately 20 percent of Professor Elhauge's purported damages.

TABLE 5 ELHAUGE PURPORTED TOTAL DAMAGES ADJUSTED: BUT-FOR ENTRY 7/11/2018 FOR ENDOWRIST SALES AND 1/14/2019 FOR DA VINCI SERVICE

		Adjusted Damages						
		EndoWrist Sales						
	Elhauge Total Damages	Price Effect	Use Limit	Combined	Service	Total		
	[1]	[2]	[3]	[4]	[5]	[6]		
Valley Medical Center	1,556,968	17,680	44,200	53,040	21,134	74,174		
Franciscan Health	5,675,651	230,860	577,150	692,580	258,733	951,313		
Larkin Community Hospital	491,054	64,260	158,400	190,980	4,457	195,437		
Classwide	2,097,721,995	121,493,297	303,424,086	364,232,565	55,567,669	419,800,234		

#### Sources and Notes:

All values in US dollars.

- [1]: Reflects servicing damage shown in Corrected Table 9 and repair and replacement damages shown in Corrected Table 7 of Elhauge Report. There are inconsistencies presented in Professor Elhauge's damages across different tables.
- 269. Lastly, Professor Elhauge asserts that, assuming Intuitive's volume of sales remains the same or higher in later years, the proposed class will continue to suffer at least \$586 million (\$125 million from da Vinci servicing and \$461 million for EndoWrists) in harm annually. These estimates are based on his purported damages in 2021 that are largely related to X/Xi instruments and X/Xi platform services that no third party has yet been able to provide. After excluding

<sup>&</sup>lt;sup>681</sup> Elhauge Report, ¶ 418.

### Case 3:21-cv-03825-AMO Document 267-18 Filed 06/06/24 Page 27 of 27

Case 3:21-cv-03825-AMO Document 259-33 Filed 05/17/24 Page 188 of 244

instrument sales and platform services related to X/Xi and implementing the adjustments I detail above, Professor Elhauge's purported total classwide damages in 2021 is reduced to \$49 million (\$14 million from da Vinci servicing and \$35 million for EndoWrists). Further, due to the increasing share of X/Xi related instrument sales and servicing revenues over time, future annual damages would likely be even lower than the adjusted classwide damages of \$49 million.